EXHIBIT A

UNITED STATES DISTRICT COURT FOR THE DISTRICT OF MASSACHUSETTS) MDL No.1592 IN RE: COLUMBIA UNIVERSITY) (MLW) PATENT LITIGATION ------VIDEOTAPED DEPOSITION OF BRUCE J. DOLNICK New York, New York Wednesday, September 29, 2004 Reported by: Frank J. Bas, RPR JOB NO. 75309

Page 1

50 Dolnick 1 2 BY MR. BARSKY: 3 Dr. Dolnick, I'm going to hand you Q. what has been marked as Exhibit 27 and ask you 10:04:32 to take a moment. 5 6 (Deposition Exhibit 27, for 7 identification, article titled Gene Amplification and Drug Resistance in 8 Cultured Murine Cells.) 10:05:47 10 (Witness reviews document.) Dr. Dolnick, do you recognize 11 12 Exhibit 27 as a publication from the Schimke lab 13 in 1978? MS. NORTON: Take as long as you 14 need to review it, Dr. Dolnick. 10:05:57 15 (Witness reviews document.) 16 17 BY MR. BARSKY: I just have a couple of questions 18 about this, Dr. Dolnick. If I can direct your 19 attention to page 1054. 10:16:19 20 MS. NORTON: I would just like to 21 note that it didn't look like the witness 22 had finished reviewing the document yet. 23 24 Q. By the way, this was a paper that **10:16:45 25** you read in connection with the work that you 51

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2 performed for Amgen in this case, correct?

17 Α. No. 18 Do you recall this work from when Q. you were in the Schimke lab? 19 10:22:46 20 You mean recall the general body of Α. 21 work? 22 Yes, the general body of work that Q. 23 you saw reported in this Exhibit 27. 24 Α. I recall most of it, yes. 10:22:55 25 Okay. Let me hand you what has been Q. 55 Dolnick 1 2 marked as Exhibit 26. 3 (Deposition Exhibit 26, for identification, article titled Selective Multiplication of Dihydrofolate Reductase Genes in Methotrexate-resistant Variants of 6 Cultured Murine Cells.) 8 Q. I just have one question about this article. 10:23:22 10 Can I look at it? Α. I beg your pardon? 11 Q. Can I look at it? 12 Α. Absolutely. 13 Q. (Witness reviews document.) 14 10:24:01 15 MR. STONE: Counsel, this has been marked as Exhibit 26, is that right? 16 MR. BARSKY: Yes. 17 MR. STONE: Thank you. 18 19 BY MR. BARSKY: 10:24:15 20 Q. While you're looking at it, I'll Page 47

just state for the record that Exhibit 26 21 appears to be an article published in the 22 Journal of Biological Chemistry in 1978. It's 23 entitled Selective Multiplication of 24 Dihydrofolate Reductase Genes in 10:24:31 25 56 **Dolnick** 1 Methotrexate-resistant Variants of Cultured 2 Murine Cells. 3 And while you're looking at that, I'll also note that Exhibit 27, which you 10:24:44 5 previously looked at, entitled Gene 6 Amplification and Drug Resistance in Cultured 7 Murine Cells. 8 9 (Witness reviews document.) BY MR. BARSKY: 10:25:10 10 If it will assist in your review of 11 the article, Dr. Dolnick, I'm not going to be 12 asking about any of the experimental results in 13 this particular paper, I'm going to have some 14 general questions about the article, but that's 10:25:22 15 all. 16 (witness reviews document.) 17 BY MR. BARSKY: 18 Dr. Dolnick, let me direct your 19 Q. attention in particular to the portion of the 10:29:00 20 discussion section that appears at the bottom of 21 page 1367. It is the last incomplete paragraph 22 on page 1367, that begins with the word 23 "clearly." Do you see that? 24 Yes. 10:29:27 25 Α. Page 48

			57
	1	Dolnick	
	2	Q. Okay, that's what I'm going to ask	
	3	you about. Why don't you take a moment to read	
	4	through the bottom of that page, and then I have	e
10:29:34	5	a question for you.	
	6	A. (Reading) Okay, I've read that	
	7	paragraph.	
	8	Q. Thank you. Do you see the question	
	9	that the authors ask in the second sentence of	
10:31:01	10	that paragraph? I'll read it into the record:	
	11	"Are they chromosomal or extrachromosomal, and	
	12	do they exist in tandem arrays or at many	
	13	locations in the genome?" Do you see that?	
	14	A. Yes, I see that.	
10:31:18	15	Q. Do you understand the authors to be	
	16	positing as an open question whether or not the	
	17	amplified DHFR genes exist on the chromosome or	
	18	off the chromosome?	
	19	A. Yeah, I think this was a reasonable	
10:31:32	20	question in 1978.	
	21	Q. Why was it a reasonable question in	
	22	1978?	
	23	 A. It was a relatively new phenomenon. 	
	24	Q. Would a person of skill in the art,	
10:31:49	25	as you have defined it, in 1980 have understood	58

Dolnick 1

2 that as well?

092904AM.txt I beg your pardon? 21 Q. where? 22 Α. Well, I believe it begins in that 0. 23 first column on 1368 and continues through --24 Starting with which paragraph? Α. 10:37:47 25 П 63 Dolnick 1 well, it actually starts with the 2 Q. paragraph that you just read, and it continues 3 through the paragraph that begins with the word 4 "Finally," on 1368. 10:38:00 5 Okay. Can I read that through? 6 Yes, go ahead. And then the 7 Q. question, so you have it in mind while you're 8 reading it, is just whether or not the authors 9 are positing different mechanisms, different 10:38:11 10 possible mechanisms for the amplification of the 11 DHFR gene. 12 (Witness reviews document.) 13 BY MR. BARSKY: 14 Are you ready for a couple of Q. 10:46:30 15 general questions about that portion of the 16 article? 17 I suppose so. Α. 18 The authors of this article from 19 Q. 1978 were proposing that gene amplification, at 10:46:38 20 least with the DHFR gene, might occur as a 21 result of a number of different mechanisms. 22 correct? 23 That's right. Α. 24 And a person of skill in the art, as Q. 10:46:49 25 Page 54

92 Dolnick 1 more likely than the other. Do you have that 2 question in mind? 3 Α. Yes. 11:38:22 5 Q. Thank you. (Witness reviews document.) 6 So Dr. Dolnick, did the authors of 7 Q. Exhibit 26 write anything that would suggest to 8 a person of skill reading this article in 1978 that one of these mechanisms was significantly 11:42:33 10 more likely than any other? 11 I haven't finished reading the 12 discussion section. 13 Q. Okav. (Witness reviews document.) 11:47:54 15 BY MR. BARSKY: 16 Based on the review that you've made 17 ο. so far, are you able to say whether or not the 18 authors distinguished the likelihood of any one 19 of these amplification mechanisms? 11:48:01 20 Actually, after -- I didn't finish 21 Α. it, but from what I've read so far, it does look 22 like they thought that some mechanisms might be 23 24 more likely than others. Which ones do you think that the 11:48:12 25 0. 93

Dolnick

Page 79

authors suggest might be more likely than

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21	092904AM.txt Q. well, when you read the first two
22	sentences of that, let me know and I'll ask you
23	the question.
24	(Witness reviews document.)
11:54:25 25	Q. A person of skill in 1980 reading
0	
	98
1	Dolnick
2	this portion of Exhibit 26 would have understood
3	the authors to be reporting both stable and
4	unstable amplified DHFR cell lines. Correct?
11:54:40 5	MS. NORTON: Objection, vague with
6	respect to reporting. And he still hasn't
7	had the chance to read the entire article.
8	If you feel you need to read the whole
9	article to answer the question, take your
11:55:09 10	time.
11	(Witness reviews document.)
12	BY MR. BARSKY:
13	Q. By the way, I agree with what your
14	counsel said. If you feel you need to read the
11:55:31 15	entire article, go ahead.
16	MR. BARSKY: But I do want to point
17	out, Ms. Norton, that we are going to need
18	Dr. Dolnick for two days.
19	MS. NORTON: You haven't asked for
11:55:41 20	that. He's scheduled to return. He has a
21	7 o'clock flight back to Buffalo tonight.
22	I have a flight back to San Diego tomorrow
23	morning.
24	(witness reviews document.)
12:01:29 25	Q. Do you still have the question in

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Dolnick 1 mind, Dr. Dolnick? 2 I haven't finished reading it yet. Α. 3 I know. But do you have the Q. 4 question in mind? 12:01:34 5 well, I won't really know until I Α. 6 have finished reading. 7 I didn't ask the answer. I just --Q. 8 I'm sorry, I didn't understand. 9 Yes, I still have the question in mind. 12:01:41 10 Thank you. Q. 11 (witness reviews document.) 12 So getting back to the question 13 again, can I have it restated just one more 14 time? 12:03:45 15 Sure. The question I wanted to ask Q. 16 you is with reference to the intriguing question 17 that's referenced towards the end of page 1368, 18 do you see that reference? 19 Yes. Α. 12:03:57 20 Okay. Would a person of skill at Q. 21 the -- let me withdraw that. 22 would a person with skill in the art 23 as of the date of the publication of this 24 article have understood that the authors were 12:04:08 25 100

1 Dolnick

2 commenting on a fact that there are stably

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I may have leafed through it. But I didn't read
         12
         13
               it.
         14
                     Q.
                            okay.
                            This publication appeared in
01:48:04 15
               Cytogenetics and Cell Genetics; is that correct?
         16
                            That's right.
         17
                     Α.
                            There are two passages I can direct
         18
                     Q.
         19
               your attention to in an effort to conserve time,
01:48:43 20
               if you would like. The first is on page 149.
         21
               It's the first complete paragraph on page 149,
         22
               in the right-hand column. The second is the
               paragraph on the following page. It's the first
         23
               complete paragraph that appears in the
         24
               right-hand column.
01:49:06 25
                                                               138
                                     Dolnick
          1
                            (Witness reviews document.)
          2
                            I'm only going to be asking you
          3
                      Q.
               about those two passages, so when you're ready
          4
01:50:38
               let me know.
                              okay?
          5
          6
                      Α.
                            Okay.
          7
                            (Witness reviews document.)
                            okay.
          8
                      Α.
                            This paper was published after
          9
                      0.
               the -- Dr. Dolnick, have you now reviewed
01:57:04 10
               Exhibit 28?
         11
         12
                      Α.
                            Yes.
                            And this is your article from 1981?
         13
                      Q.
                            This is Ronald Berenson's article.
         14
                      Α.
01:57:17 15
               I'm a coauthor on this article.
                            And if you were a coauthor on this
         16
                      Q.
                                       Page 118
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		092904AM.txt
	12	referring to the not to the transformation
	13	with the linearized plasmid, but they're
	14	referring to the transformation of the in vitro
03:14:35	15	ligated DNA. So if we want to talk about the
	16	plasmid, I think we have to find the appropriate
	17	paragraphs that specifically refer to that.
	18	Q. Okay, do you want to take a look for
	19	that?
03:14:50	20	A. Sure. So I'm looking for references
	21	with regard to stability; is that correct? Is
	22	that what you want me to be looking for?
	23	Q. Yes.
	24	(witness reviews document.)
03:16:46	25	 A. I'm having a difficult time
0		173
		1,3
	1	Dolnick
	2	discriminating where the authors make a
	3	distinction between the clones that were
	4	transfected with the linearized plasmid versus
03:16:55	5	the plasmid ligated in vitro, in terms of
	6	stability of ovalbumin.
	7	Q. Earlier you testified with respect
	8	to chromosomal integration being a fair
	9	inference from the presence of the TK+ gene in
03:17:15	10	the high molecular weight DNA. Is that correct?
	11	A. I testified that chromosomal
	12	integration of a TK gene after transformation
	13	with high molecular weight DNA would be
	14	expected?
	-	CAPOCOCA
03:17:28		Q. Yes.
03:17:28		

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092904AM.txt
               got that impression from. That's all.
         3
                           From reading the paper.
          4
                           Okay. And if you can't point to it
                     Q.
03:30:00
          5
               quickly, then don't bother. But take a quick
          6
               look and see if you can find the passage that
          7
               reports on that.
           8
                            (Witness reviews document.)
           9
                            So they're saying three out of the
                      Α.
 03:30:49 10
                seven clones, if I'm interpreting this correct,
          11
                contain portions of the ovalbumin gene.
          12
                             MS. NORTON: Take all the time you
          13
                       need to review the reference.
           14
                             THE WITNESS: Okay.
 03:31:18 15
                             (Witness reviews document.)
                             The place we should be looking is on
           16
           17
                 page 245.
           18
                              okay.
                        Q.
            19
                              And it states there, in the intact
                        Α.
  03:31:44 20
                  paragraph, it's specifying transformation with
                  the linearized POV12 TK plasmid, and it says that
            21
            22
                  they isolated six transformants. "All six
                  transformants showed a predominant hybridization
            23
            24
                   signal at 12.2 kb, indicating that the entire
   03:32:04 25
                                                                  185
   П
                                         Dolnick
              1
                    12.2 kb of chicken DNA from POV12 - TK was
              2
                    present."
                                And these are data regarding the
               3
                          Q.
               4
                    chimeric plasmid experiment?
     03:32:16
               5
                                That's correct.
                                 And when they say they identified
               6
                           Q.
                                           Page 158
               7
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092904AM.txt to just read it and then answer the question? 17 It would probably facilitate it. 18 Α. A framework? 19 Q. A framework. 03:46:06 20 Α. Certainly. First I'm going to ask 21 Q. you to point to what data were reported, or what 22 discussion was had in this article that you 23 believe would have changed the way a person of 24 skill in the art viewed the viability of reverse 03:46:19 25 188 Dolnick 1 transcription as an amplification mechanism. 2 Let's start there. 3 Α. Okay. 4 Thank you. 03:46:29 5 Q. (witness reviews document.) 6

7 A. Okay.

8 Q. Have you now read Exhibit 29?

9 A. I have.

04:14:15 10 Q. Can you identify this, Dr. Dolnick,

as the article by Kaufman and others from 1979

12 that you testified about earlier in your

13 testimony?

14 A. Yes. This is the article that I

04:14:39 15 referred to earlier.

16 Q. Before I ask you some specific

17 questions about this article, I want to go back

18 to one issue that we discussed earlier. As of

19 -- and I want to construct a hypothetical for

04:14:52 20 you, if I could.

	092904AM.txt
12	it mischaracterizes the claim as a process
13	claim.
14	A. So you're asking me if it requires
06:47:31 15	some amplification within the chromosome?
16	Q. Yes.
17	A. I don't think that is stated
18	anywhere within the claim.
19	Q. Okay. And so you don't think that
06:47:39 20	it would be a requirement, Claim 19. Is that
21	fair?
22	A. I think it did happen I don't
23	think it would be a requirement based upon what
24	I'm reading here.
06:47:49 25	MR. BARSKY: Counsel?
	271
1	Dolnick
2	MS. NORTON: Are you done with that
3	line of questioning, or will you finish in
4	the next few minutes?
06:47:56 5	MR. BARSKY: No. Should we have our
	7
6	competing statements on the record now?
6 7	You tell me, and we could let Dr. Dolnick
	You tell me, and we could let Dr. Dolnick go. You tell me. You have advised me that
7	You tell me, and we could let Dr. Dolnick go. You tell me. You have advised me that you're going to terminate the deposition,
7	You tell me, and we could let Dr. Dolnick go. You tell me. You have advised me that you're going to do, we
7 8 9	you tell me, and we could let Dr. Dolnick go. You tell me. You have advised me that you're going to terminate the deposition, so if that's what you're going to do, we
7 8 9 06:48:08 10	You tell me, and we could let Dr. Dolnick go. You tell me. You have advised me that you're going to terminate the deposition, so if that's what you're going to do, we can you can tell your witness to leave, and then we can
7 8 9 06:48:08 10 11	You tell me, and we could let Dr. Dolnick go. You tell me. You have advised me that you're going to terminate the deposition, so if that's what you're going to do, we can you can tell your witness to leave, and then we can
7 8 9 06:48:08 10 11	You tell me, and we could let Dr. Dolnick go. You tell me. You have advised me that you're going to terminate the deposition, so if that's what you're going to do, we can you can tell your witness to leave, and then we can MS. NORTON: Can I ask the court reporter to tell me what the total
7 8 9 06:48:08 10 11 12	You tell me, and we could let Dr. Dolnick go. You tell me. You have advised me that you're going to terminate the deposition, so if that's what you're going to do, we can you can tell your witness to leave, and then we can MS. NORTON: Can I ask the court reporter to tell me what the total

we've been on for seven hours and two

Dolnick

	17	WE VE DEEL ON TO! Seven Hours and the
	18	minutes.
	19	MS. NORTON: I was right, then.
06:48:27	20	Okay, it's our position that we produced
	21	Dr. Dolnick at 9 o'clock this morning, and
	22	it is now nearly 7 o'clock p.m., and that
	23	you've had seven hours with which to
	24	question him, that you spent several hours
06:48:42	25	of your time asking him basically the same
u		277

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272

1 question over and over about reverse 2 transcription, and that's the way you've 3 made use of your time, and the time is now over. In the schedule that your client 06:48:51 sent around proposing a schedule for the 6 expert depositions, you only asked for one 7 day with Dr. Dolnick, and one day is seven 8

hours.

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06:49:02 10

06:49:13 15

06:49:28 20

MR. BARSKY: And we've already met and conferred on the motion we're filing on this. We understand you're terminating the deposition. I'm not going to brief the issue now. You know what my position is about us not having had a full opportunity to depose Dr. Dolnick. You know we're not done. And so rather than take up anyone's time or transcript pages, we're going to just simply brief the issue in our motion that will be filed very shortly. And so

	092904AM.txt
21	you are terminating the deposition,
22	correct?
23	MS. NORTON: I think that the
24	deposition has gone its natural course, its
06:49:41 25	full seven hours, and I think it's time for
	273
	2/3
1	Dolnick
2	Dr. Dolnick to get to go home.
3	MR. BARSKY: Okay. Well, there's a
4	difference between thinking it's time and
06:49:51 5	terminating the deposition. If your
6	position is the deposition's terminated,
7	then just say it.
8	MS. NORTON: Our position is that
9	you've had the full seven hours that you
06:49:59 10	asked for and that you're entitled to with
11	Professor Dolnick.
12	MR. BARSKY: Well, I think we are
13	adjourned, in that case.
14	THE VIDEOGRAPHER: This concludes
06:50:10 15	today's deposition of Bruce Dolnick. We're
16	now off the record at 6:48 p.m., 9/29/04.
17	(Time noted: 6:48 p.m.)
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23	
24	
25	Page 234
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